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On the preparation of the III edition of the "Red Book" of the Republic of Azerbaijan: Red List of Karabakh fauna

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The article has been developed relying on the results of research conducted by the staff of the Institute of Zoology of ANAS before the occupation of Karabakh and surrounding areas by Armenia. According to previous years' research in Karabakh and surrounding areas, which have been under occupation for nearly 30 years, 56 species of insect fauna are rare, endemic and endangered. Of the 53 fish species registered in the Lesser Caucasus of Azerbaijan, 7 are included in the Red Book of Azerbaijan (2013), and 4 species are included in the IUSN Red List. It was determined that 12 species of fish are distributed in the Hakari River, and 13 species in the Basitchay and Okhchuchay rivers. In the Lesser Caucasus natural region, 4 out of 11 species of amphibians belonging to the batrakhofauna of Azerbaijan and 35 out of 63 species of reptiles belonging to the herpetofauna are registered. 1 species of tortoises, 10 species of lizards and 13 species of snakes are distributed in the fauna of Karabakh. One species of amphibians and 7 species of reptiles were included in IUCN and GK (2013). Prior to the occupation, 32 species out of about 200 bird species registered in 16 orders and 57 families in Karabakh and its environs were included in the II Edition of the Red Book (2013). Most of these species are included in the lists of international conventions (Bern, Bonn, CITES, AEWA). Prior to the occupation of Karabakh, 24 species out of 75 species of mammals belonging to 6 orders were included in the Red Book of Azerbaijan (2013). Five of them are also included in the Red List of the International Union for Conservation of Nature (IUSN). The second edition of the Red Book of Azerbaijan, published in 2013, included 223 species of animals that are rare, endangered and in need of protection. Of these, 1 species belongs to the class *Oligochaeta*, 1 species *Crustacea*, 1 species *Mollusca*, 77 species *Insecta*, 9 species P*isces*, 6 species *Amphibia*, 14 species *Reptilia*, 72 species Aves, 42 species *Mammalia*. The third edition of the RB, which is scheduled for publication in 2023, will embrace 279 species of rare and endangered species. The issue of medical leech and 2 bony fish species proposed to be included in the 3rd edition of the Red Book of Azerbaijan will be clarified. It is proposed to remove 77 species of insects included in the second edition of the Red Book, 14 species in the third edition, and to increase the number of species on the updated list to 118 by adding 55 species. The list of amphibians (6 species) will not be changed, and the list of reptiles will include 6 additional species of reptiles. The third edition will consider the inclusion of 15 new species in the previous list, the second edition will consider the removal of 8 species of mammals from the list of mammal species and the inclusion of 1 species in the updated list of mammals.

Keywords*: Fauna, invertebrate, vertebrate, Red Book, amphibian, reptile, fish, mammal, IUSN, order, family*

INTRODUCTION

The Republic of Azerbaijan, which occupies one of the unique places in the world for its biological diversity, is the country with the richest natural resources in the Caucasus region. In recent years, as a result of anthropogenic factors threatening biodiversity and ecosystems around the world, ecosystems have been degraded, and many animal species and breeds have become extinct or threatened

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with extinction. According to the International Union for Conservation of Nature (IUSN), one species of animal disappears from our planet every day. 1000 species of birds and mammals are in danger of extinction, one in four amphibians and one in seven reptiles are in danger of extinction (Fauna of Azerbaijan, Volume III). Such cases have not escaped the fauna of Azerbaijan. In particular, there is no information on the current state of fauna in Karabakh and surrounding areas, which have been under occupation for nearly 30 years.

The Turanian tiger, once was common in the wild nature in Azerbaijan, has become extinct, and the Talysh pheasant (*Ph.c. talischensis*) is on the verge of extinction. There are no reports of the Pallas' cat (*Otocolobus manul*) or striped hyaena (*Hyaena hyaena*) in our fauna in the last 20 years. Such a state of biodiversity requires serious measures for its conservation and sustainable use. Very important work has been done in Azerbaijan to protect wildlife. The adoption of laws in this direction, the publication of the Red Book, the beginning of work on the preparation of the third edition, the creation of reserves, sanctuaries, national parks in various landscapes is the chain of such work.

The National Strategy and Action Plan for the Protection and Sustainable Use of Biological Diversity was approved and successfully implemented in our country by the Decree of the President of the Republic of Azerbaijan dated March 24, 2006, on the conservation and sustainable use of biological diversity.

In the Lesser Caucasus, the charming nest of Azerbaijan, which has been subjected to environmental terror by Armenia for nearly 30 years, has a very rich invertebrate and vertebrate world, with Karabakh and its surrounding regions sharply different from other regions of Azerbaijan in terms of natural conditions and vegetation. The fate of rare and endangered species, inhabiting the landscapes and biotopes of Karabakh and the liberated territories of the Lesser Caucasus is of greater concern.

Although specialists of the Institute of Zoology of ANAS conduct regular and intensive monitoring of fauna species in Azerbaijan, no monitoring has been conducted in occupied Karabakh and surrounding areas for about 30 years, and there is no information about the fauna of this region. During this period, as a result of environmental terror committed by Armenia, animal habitats were destroyed, populations were destroyed, caves, where they took refuge, were turned into weapons depots, and large animals were injured by landmines in mined areas. Due to the occupation of a large area of the Lesser Caucasus, the fauna of this unique region, home to many rare and economically important species, has gone unchecked. Contrary to international law and aimed at protecting the environment and wildlife, Armenia has had a devastating effect on the environment and nature. Undoubtedly, the savage treatment of nature has led to the loss of habitat and a decrease in the number of species that are susceptible to adverse effects.

MATERIALS AND METHODS

The results of research conducted by the staff of the Institute of Zoology of ANAS before the occupation of Karabakh and surrounding regions by Armenia have been utilized in writing the article.

RESULTS AND DISCUSSION

The charming nest of Azerbaijan occupied by Armenia, Karabakh and its surrounding regions have always been distinguished by the richness of its fauna diversity, differing sharply from other regions of Azerbaijan by its natural conditions. Until the beginning of the XX century, the fauna of Azerbaijan, including the Karabakh region, has always been in the focus of foreign researchers. Both Tsarist Russia and the Soviet Union conducted research in this area. In the late XIX and early XX centuries, K.Satunin, A.Vasilin, and P.Esben-Petersen conducted some research in all areas of Karabakh, including Horadiz, Shusha, Hadrud, and Fizuli districts.

At the beginning of the last century in the Lesser Caucasus, including Karabakh and surrounding areas, scientists of the Institute of Zoology of ANAS - I.Yevstropov, A.Bogachev, N.Yakovleva, Kh.Aliyev, R.Efendi, A.Abdinbayova, L.Rzayeva, S.Aliyev, N.Samadov, A.Aliyev, Z.Rasulova, N.Loginova and others conducted entomological studies.

Currently, over 10,000 species of insects, 63 species of reptiles, 11 species of amphibians, 104

species of fish and 115 species of mammals have been identified in our fauna as a result of the work of scientists working at the Institute of Zoology of the Azerbaijan National Academy of Sciences and other scientific research institutions and universities. Some of the species belonging to this fauna have the status of small and rare species. Arthropods make up 85% of all animal species found in Azerbaijan. Of the identified insect species, 370 were new species for science, 800 for the CIS countries, and more than 1,700 for the South Caucasus and Caucasian fauna. Arthropods found in the Azerbaijani territories of the Lesser Caucasus accounted for about 20% of the total arthropods distributed in Azerbaijan. In general, 79 species of invertebrates are included in the second edition of the Red Book in Azerbaijan (2013), including 1 species of annular worms (Annelida), 1 species of mollusks (Mollusca), 74 species of arthropods (Arthropoda), 4 species of hymenoptera (Hymenoptera). Pre-occupation species in the Lesser Caucasus accounted for about 20% of the total arthropods in Azerbaijan. 56 species of insect fauna in the occupied territories are rare, endemic and endangered. From beneficial insects Braconids - Braconidae, chalcids - Chalcidoidea, ichnevmonids - Ichneumonidae and aphids - Apidae are widespread in Karabakh and its environs (Абдинбекова, 1969; Рзаева, 1971, 2002; Алиев, 1985, 1980, 1983, 1984). In the territories of Shusha, Kalbajar, Lachin, Aghdara, Fizuli, Aghdam, Zangilan regions occupied for about 30 years until the 80s of the XX century, 49 species belonging to 13 genus of the family Halictidae: 10 species (*Halictus vestitus* Lepeletier, 1841, *H.sexcinctus* (Fabricius, 1775), *H.patellatus* Morawitz, 1873, *H.tetrazonius* (Klug, 1817), *H.maculatus* Smith, 1848, *H.setulosus* Strand, 1909, *H.scardius* Bluthgen, 1936, *H.quadricinctus* (Fabricius, 1776), *H.resurgens* Nurse, 1903, *H.simplex* Blüthgen 1923) of the genus Halictus Latreille, 1804, 12 species (*Lasioglossum discum* (Smith, 1853), *L.fallax* Morawitz, 1874, *L.leucozonius* (Schrank, 1781), *L.laevigatum* (Kirby,1802), *L.lativentre* (Schenck, 1853), *L.tadschicum* (Blüthgen, 1929), *L.aegypticollum* Strand, 1909, *L.zonulum* (Smith, 1848), *L.xanthopus* (Kirby, 1802), *L.denticole* Morawitz, 1876, *L.alievi* Pesenko, 1986, *L.majus* (Nylander, 1852)) of the genus *Lasioglossum* Curtis, 1833, 7 species (*Evylaeus marginatus* Brulle, 1832**,** *E.minutissimus* (Kirby, 1802), *E.clypearis* (Schenck, 1853), *E.sexstrigatus* Schenck, 1868, *E.politus* (Schenck, 1853), *E.malachurus* (Kirby, 1802), *E.lucidulus* (Schenck. 1861)) of the genus Evylaeus Robertson, 1902, 3 species (*Seladonia smaragdulus* Vachal 1895, *Seladonia subauratus* (Rossi, 1792), *Seladonia varipes* Morawitz, 1876) of the genus *Seladonia* Robertson, 1918, 1 species (*Vestitohalictus radoskovskii* Vachal, 1902) of the genus *Vestitohalictus* Blüthgen, 1961, 6 species (*Sphecodes monilicornis* (Kirby,1802), *S.alternatus* Smith, 1853, *S.gibbus* Linnaeus, 1758, *S.punctipes* Thomson, 1870, *S.gracilior* Pérez 1903, *S.pellucidus* Smith, 1845*)* of the genus *Sphecodes* Latreille, 1804, 1 species (*Ceylalictus variegates* (Olivier, 1789)) of the genus *Ceylalictus* Strand, 1913, 1 species of (*Nomioides minutissimus* (Rossi, 1790)) the genus *Nomioides* Schenck, 1867, 5 species (*Nomia diversipes* Latreille, 1806, *N.unidentata* (Olivier, 1811), *N.squamata* (Morawitz 1895), *N.lutea* Warncke, 1976, *N.innesi* (Gribodo, 1894)) of the genus *Nomia* Laterille,1804, 1 species (*Halictoides dentiventris* Nylander, 1848) of the genus *Halictoides* Nylander 1848, 1 species (*Rhophitoides canus* (Eversmann, 1852)) of the genus *Rhophitoides* Schenck, 1861, 1 species (*Rophites foveolatus* Friese, 1900) of the genus *Rophites*, 1 species (*Systropha planidens* Giraud, 1861) of the genus *Systropha* Illiger 1806 (Hüseynzadə, 2021), 9 species (*Julodis andreae andreae* Olivier, 1790, *Capnodis cariosa cariosa* Pallas, 1776, *Perotis lugubris longicollis* Kraatz, 1880, *Sphenoptera mesopotamica* Marseul, 1865, *Sphenoptera tamarisci beckeri* Dohrn, 1866, *Sphenoptera tenax* Jakovlev, 1902, *Anthaxia hungarica sitta* Küster, 1852, *Coraebus rubi* Linnaeus, 1767, *Meliboeus robustus* Küster, 1852) of Jewel beetles – Buprestidae (Huseynova, 2021) 10 species of long-horned beetles – *Cerambycida*e_(Səmədov, 2010), 90 species of braconids – Braconidae (Абдинбекова, 1975), 60 species of butterflies – *Rhopalocera* (Snegovaya, Petrov, 2019), 6 species (*Cueta anomala* (Navás, 1915), *Creoleon plumbeus* (Olivier, 1811), *Palpares libelluloides* (Linnaeus, 1764), *Myrmecaelurus trigrammus* (Pallas, 1781), *Distoleon tetragrammicus* (Fabricius, 1798), *Myrmecaelurus solaris* (Krivokhatsky, 2002)) of Myrmeleontidae, 1 species (*Deleproctophylla variegata* (Klug, 1845)) *Ascalaphidae* and 1 species (*Nemoptera sinuata* Olivier,

1811) of *Neuropteridae* (Kərimova, Şahverdiyeva, 2021) have been recorded. In addition to agricultural pests, these species include rare and endangered species. 152 species of agricultural and fruit-forest pests belonging to the group of insects were noted (Самедов, Мирзоева, 1982). Among the rare species, *Empusa fasciata* Brullé, 1832 belonging to empusids was recorded in Shusha in 1906, and *Nemoptera sinuata* Olivier, 1811 in Zangilan in 1978, and 9 rare butterfly species were recorded by Aliyev (Алиев, 1984). 56 species of insect fauna in the occupied territories are rare, endemic and endangered.

10 of the 28 species of pests registered by Samadov in Azerbaijan in the 60s and 80s of the XX century (*Cyphosoma tataricum* (Pallas, 1773), *Capnodis tenebrionis* (Linnaeus, 1758), *C.miliaris miliaris* (Klug, 1829), *C.cariosa* (Pallas, 1776), *Perotis lugubris longicollis* Kraatz, 1880, *Lamprodila bella* (Gory, 1840), *Eurythyrea quercus* (Herbst, 1780), *Anthaxia cichorii* (Olivier, 1790), *A.bicolor bicolor* Falderman, 1835, *A.tractata*, Abeille de Perrin, 1901) is reported to be found in the Karabakh region (Huseynova, 2021).

The longhorn beetles - *Rhaesus serricollis* (Motschulsky, 1838), *Rosalia alpina* (Linnaeus, 1758), Caucasian splashing snaileater - (Carabus (Procerus) scabrosus caucasicus Adams, 1817), pretty ground beetle - *Calosoma sycophanta* (Linnaeus, 1758), the leaf-eating insect - *Labidostomis montana*, the white-spotted andrena - *Andrena albopunctata* (Rossi, 1792), *Zygaena tamara* Christoph, 1889, *Anthocharis gryneri* (Linnaeus, 1758), *Colias thiosa, Colias caucasica* Staudinger, 1871, *Manduca atropos* (Linnaeus, 1758), *Cyrebia anachoreta* (Herrich-Schäffer, 1851), *Isochlora viridis* (Staudinger, 1882) *(Noctuidae)*, the marvelous moth - *Staurophora celsia*, the scarlet tiger moth - *Collimorpha dominula*, the garden tiger moth - *Arctia caja* (Linnaeus, 1758), are included in the Red Book of Azerbaijan (2013).

In the modern fauna of Azerbaijan, vertebrates are represented by 700 species (Azərbaycan Faunasının taksonomik spektri. Onurğalılar, 2020). In the Kura River (including Varvara, Mingachevir, Yenikend, Shamkir reservoirs) bordering the Lesser Caucasus and its right tributaries (Khramchay, Agstafachay, Hasansu, Tovuzchay, Zayamchay, Shamkirchay, Goshgarchay, Ganjachay, Kurekchay, Tartarchay, Khachin) and in its left tributaries (Arpachay, Nakhchivanchay, Alinjachay, Gilanchay, Okhchuchay, Hakarichay, Kondelanchay), in the surrounding lakes (Sarisu, Aghgol, Mehman and other small lakes and ditches), in Upper Karabakh and other canals for irrigation, in Tartarchay reservoir, 53 species and subspecies of fish in Alagol, Karagol and other small water basins have been sprawled out (*Caspiomyzon wagneri* (Kessler, 1870) - Caspian Lamprey, *Salmo fario* Linneus, 1758 - River Trout, *Salmo caspius* Kessler, 1877 - Caspian Trout, *Salmo ischchan* Kessler, 1877 - Sevan Trout, *Esox lucius* Linnaeus, 1758 - Northern Pike, *Leuciscus cephalus orientalis* Kamensky, 1901 - Chub, *Scardinius erythrophthalmus* (Linnaeus, 1758) - Common Rudd, *Aspius aspius taeniatus* (Eichwald, 1831) - Aral Asp, *Leucaspius delineatus* (Heckel, 1843) - Belica, *Tinca tinca* Linnaeus, 1758) - Tench, *Pseudorasbora parva* (Temminck et Schlegel, 1846) - Stone Moroko, *Chondrostoma cyri* Kessler, 1877 - Terek Nase, *Romanogobio persa* (Günther, 1899) - Kura Gudgeon, *Capoeta sevangi* De Filippi, 1865 - Sevan Khramulya, *Luciobarbus capito* (Güldenstädt, 1773) - Bulatmai Barbel, *Luciobarbus brachycephalus caspius* (Berg, 1914) - Caspian Barbell, *Luciobarbus lacerta cyri* De Filippi, 1865 - Kura Barbel, *Luciobarbus mursa* (Güldenstädt, 1773) - Mursa, *Chalcalburnus chalcoides* (Güldenstädt, 1772) - Kura Bleak, *Alburnus hohenackeri* Kessler, 1877 - Caucasian Bleak, *Alburnus filippi* (DeFilippi, 1844) - Kura Bleak, *Acanthalburnus microlepis* (DeFilippi, 1863) - Blackbrow Bleak, *Alburnoides bipunctatus eichwaldi* (DeFilippi, 1863) - Caucasian Bream, *Blicca bjoerkna transcaucasica* (Linnaeus, 1758) - Silver Bream, *Abramis brama orientalis* (Berg, 1949) - Freshwater Bream, *Abramis sapa bergi* (Belyaev, 1929)- White-eye Bream, *Vimba vimba persa* (Pallas, 1814) - Caspian Vimba, *Hemiculter leucisculus* (Basilewsky, 1855) – Sharpbelly, *Pelecus cultratus* (Linnaeus, 1758) – Sichel, *Rhodeus sericeus amarus* Bloch, 1782) - Amur Bitterling, *Cyprinus carpio* (Linnaeus, 1758) - Carp, *Carassius auratus gibelio* (Bloch, 1782) - Silver Prussian Carp, *Barbatula angorae* (Steindachner, 1897) - Angora Loach, *Barbatula brandti* (Kessler, 1877) - Kura Loach, *Cobitis taenia satunini* (Barach, 1941)- Spined Loach, *Sabanejewa aurata* (De Filippi, 1863) - Golden Spined Loach, *Sabanejewa caspia* (Eichwald, 1838) - Caspian

Spined loach, *Silurus glanis* (Linnaeus, 1758) - Wels Catfish, *Gambusia affinis* (Baird & Girard, 1853) - Western Mosquitofish, *Perca fluviatilis* Linnaeus, 1758 - European Perch, *Sander lucioperca* Linnaeus, 1758 – Zander, *Neoqobius (Ponticola) platyrostris constructor* (Nordmann, 1840) - Caucasian Goby, *Neoqobius pallasi* (Berg 1916) - Caspian Sand Goby, *Neoqobius (Ponticola) gorlap* (Iljin, 1949) - Caspian Bighead Goby, *Proterorhinus marmoratus* (Pallas, 1814) - Tubenose Goby) (Абдурахманов, 1966).

Karabakh and the liberated territories are rich in reservoirs (rivers, lakes, reservoirs, springs, etc.). For nearly 30 years, these reservoirs have been subjected to environmental terror. Environmental terror has also affected the fish fauna that has formed over the years. It should be noted that the ichthyofauna of these areas is very poorly studied. The ichthyofauna of the Hakari River, one of the largest rivers in the liberated territories, was studied by Abdurahmanov (Абдурахманов, 1966) in the 60s of the last century, and the ichthyofauna of Basitchay and Okhchuchay in the 70s by Mammadova and Nasirov (Мамедова, Насиров, 1975). The authors determined that 12 species of fish are distributed in the Hakari River, and 13 species of fish in the Basitchay and Oxchuchay rivers.

In studying the amphibian and reptile fauna of the occupied territories, Aliyev, Alakperov Jafarova, Ahmadov (Алиев, 1974, Алекперов, 1978, Джафарова, 1981, 1982; Алекперов, Джафарова, 1979, Ахмедов, 1981), and others had special merits.

Of the 11 species of amphibians belonging to the batrachafauna of Azerbaijan, and 35 of the 63 species of reptiles belonging to the herpetofauna, were registered in the Lesser Caucasus natural region (Джафарова, 1984, 2004).

In the territory of Karabakh, 1 from reptile fauna (*Testudo graeca* Linnaeus 1758), 10 lizards (*Trapelus ruderatus* (Olivier, 1804), *Paralaudakia caucasica* (Eichwald, 1831), *Phrynocephalus horvathi,* DeFilippi, 1863*, Trachylepis septemtaeniata* (Reuss, 1834), *Eumeces shneideri* (Daudin, 1802), *Eremias strauchi* Kessler, 1878, *E.pleskei* Nikolsky, 1905, *Psedopus apodus* (Pallas, 1775), *Ophisops elegans* énétries, 1832*, Lacerta strigata* Eichwald, 1831), 13 species of snakes (*Typhlops vermicularis* Merrem, 1820*, Eryx jaculus* (Linnaeus, 1758), *Platyceps najadum* (Eichwald 1831), *Dolichophis shmidti* (Nikolsky, 1909)*, Hemerrhois ravergieri* (Menetries, 1832)*, Eirenis collaris* (Menetries, 1832)*, E.punctatolineata* (Boettger, 1892)*, E.modestus* Martin, 1838*, Rhynchocalamus melanocephalus* (Jan, 1862), *Telescopus fallax* Fleischmann, 1831, *Psammophis lineolatus* (Brandt, 1838), *Malpolon monspessulanus* (Hermann, 1804), *Macrovipera lebetina obtusa* (Dwigubsky, 1832)) have been sprawled out (Cəfərova, Bünyatova, 2021).

Eurasian Marsh Frog - *Pelophylax ridibundus*, Levantine Viper - *Macrovipera lebetina optusa*) are considered to be economically viable species in these areas. One species of amphibians (*Hyla orientalis* - Oriental Tree Frog) found in the Lesser Caucasus and adjacent foothills of Azerbaijan has been included in the IUCN Red List, and 7 species of reptiles (*Testudo graeca* - Common Tortoise, *Trapelus ruderatus* - Horn-scaled Agama, *Ablepharus bivittatus* - Twin-striped Skink, *Elaphe sauromates* - Urartian Ratsnake, *Zamenis hohenackeri* - Transcaucasian Ratsnake, *Coronella austriaca* - Smooth Snake, *Montivipera raddei* Radde ' s Rock Viper) were included in the IUCN Red List and in the Red Book of Azerbaijan (2013). Common Tortoise - *Testudo graeca* is as an endangered, Rostombekov's Lizard - *Darevskia rostombekovi* has been included in the IUSN Red List with the status of a critically endangered species. The Mediterranean tortoise is also on the CITES International Trade in Prohibited Species (https://cites.org/eng/app/appendices.php).

Of the snakes, the South Transcaucasian Ratsnake - *Zamenis hohenackeri* (Strauch, 1873) and Urartian Ratsnake - *Elaphe sauromates* (Pallas, 1811) are endemic species of the Caucasus (İsgəndərov və b., 2021).

As a result of the latest inventory of our ornithofauna and inspection of collection materials, as well as critical processing of all scientific data, 407 species of birds belonging to 19 groups, 64 families, 209 genera were identified in the territory of Azerbaijan (Azərbaycan Faunasının taksonomik spektri. Onurğalılar, 2020). The bird fauna of the Lesser Caucasus was richer than that of other groups of animals. About 200 species of 367 species of birds belonging to 16 orders and 57 families existed in Azerbaijan before the occupation in this area (*Pernis apivorus* (Linnaeus, 1758) - European Honey-buzzard, *Milvus milvus* Linn., 1758 - Red Kite, *M.migrans* Bodd., 1783 - Black Kite, *Accipiter gentilis*

Linn., 1758 - Eurasian Goshawk, *Accipiter nisus* Linn., 1758 - Eurasian Sparrowhawk, *Buteo lagopus* Pont., 1763 - Rough-legged Buzzard, *B.buteo* Linn., 1758 - Common Buzzard, *Circaetus gallicus* Gmelin, 1788 - Short-toed Eagle, *Aquila heliaca* Savigny, 1809 - Asian Imperial Eagle, *A.chrysaetos* Linn., 1758 - Golden Eagle, *Falco cherrug* Gray, 1834 - Saker Falcon, *F.peregrinus* Tunst., 1771 - Peregrine Falcon, *F.biarmicus* Temm., 1825 - Lanner Falcon, *F.subbuteo* Linn., 1758 - Hobby Falcon, *F.naumanni* Fleischer, 1818 - Lesser Kestrel, *F.tinnunculus* Linn., 1758 – Kestrel, *Neophron percnopterus* Linn., 1758 - Egyptian Vulture, *Gyps fulvus* Habl., 1783 - Griffon Vulture, *Aegypius monachus* Linn., 1766 - Black Vulture, *Gypaetus barbatus* Linn., 1758 - Bearded Vulture, *Lyrurus mlokosiewiczi* Taczanowski, 1875 - Caucasian Black Grouse, *Tetraogallus caspicus* Gmelin, 1784 - Caucasian Black Grouse, *Alectoris chukar* Gray, 1830 – Chukar, *Francolinus francolinus* Linn., 1766 - Black Francolin, *Perdix perdix* - Grey Partridge, *Coturnix coturnix* Garsault, 1764 – Quail, *Phasianus colchicus* Linn., 1758 - Common Pheasant, *Grus grus* Linn., 1758 - Common Crane, *Leucogeranus leucogeranus* Pall., 1773 - Siberian Crane, *Antropoides virgo* Linn., 1758 - Demoiselle Crane, *Rallus aquaticus* Linn., 1758 - Water Rail, *Crex crex* Linn., 1758 - Corn Crake, *Scolopax rusticola* Linn., 1758 - Eurasian Woodcock, *Glareola pratincola* Linn., 1766 - Collared Pratincole, *Columba palumbus* Linn., 1758 - Wood Pigeon, *C.oenas* - Stock Dove, *C.livia* Gm., 1789 - Rock Dove, *Cuculus canorus* Linn., 1758 – Cuckoo, *Bubo bubo* Linn., 1758 - Eurasian Eagle Owl, *Asio otus* Linn., 1758 - Long-eared Owl, *Otus scops* Linn., 1758 - Scops Owl, *Athene noctua* - Little Owl, *Strix aluco* - Tawny Owl, *Coracias garrulus* - European Roller, *Merops apiaster* - European Bee-eater, *M. persicus* - Blue-cheeked Bee-eater, *Upupa epops* - Eurasian Hoopoe, *Jynx torquilla* - Eurasian Wryneck, *Picus viridis* - Eurasian Green Woodpecker, *Dryocopus martius* - Black Woodpecker, *D.major* - Great Spotted Woodpecker, *D.syriacus* - Syrian Woodpecker, *D.medius* - Middle Spotted Woodpecker, *D.minor* - Lesser Spotted Woodpecker, *Riparia riparia* - Sand Martin, *Ptyonoprogne rupestris* - Crag Martin, *Hirundo rustica* - Barn Swallow, *Delichon urbicum* - Northern House Martin, *Lullula arborea* – Woodlark, *Eremophila alpestris* - Horned Lark, *Anthus trivialis* - Tree Pipit, *A.spinoletta* - Water Pipit, *Motacilla flava* - Western Yellow Wagtail, *M.citreola* - Citrine Wagtail, *Lanius collurio* - Red-backed Shrike, *L.senator* - Woodchat Shrike, *L.minor* - Lesser Grey Shrike, *L.excubitor* - Great Grey Shrike, *Oriolis oriolis* - Golden Oriole, *Sturnus vulgaris* – Starling, *Pastor roseus* - Rosy Starling, *Garrulus glandarius* – Jay, *Pica pica* – Magpie, *Pyrrhocorax pyrrhocorax* - Red-billed Chough, *P.graculus* - Yellow-billed Chough, *Coloeus monedula* - Eurasian Jackdaw, *Corvus corone* - Carrion Crow, *C.cornix* - Hooded Crow, *Bombycilla garrulus* - Bohemian Waxwing, *Troglodytes troglodytes* – Wren, *Prunella collaris* - Alpine Accentor, *P.modularis* – Dunnock, *Locustella fluviatilis* - River Warbler, *Hippolais icterina* - Icterine Warbler, *Iduna caligata* - Booted Warbler, *I.pallida* - Eastern olivaceous Warbler, *Pterocles alchata* - Pin-tailed Sandgrouse, *Regulus regulus* – Goldcrest, *Ficedula albicilla* - Taiga Flycatchers, *Muscicapa striata* - Spotted Flycatcher, *Saxicola rubetra* – Whinchat, *Saxicola torquatus* - Common Stonechat, *Oenanthe oenanthe* - Northern Wheatear, *O.pleschanka* - Pied Wheatear, *O.finschi* - Finsch-s Wheatear, *O.isabelina* - Isabelline Wheatear, *Monticola saxatilis* - European Rock Thrush, *Phoenicurus ochruros* - Black Redstart, *Erithacus rubecula* - European Robin, *Luscinia luscinia* - Thrush Nightingale, *Turdus atrogularis* - Black-throated Thrush, *Turdus pilaris* – Fieldfare, *T.torquatus* - Ring Ouzel, *T.merula* - Eurasian Blackbird, *T.philomelos* - Song Thrush, *T.iliacus* – Redwing, *T.viscivorus* - Mistle Thrush, *Aegithalos caudatus* - Long-tailed Tit, *Sitta europea* - Eurasian Nuthatch. *S.neumayer* - Western Rock Nuthatch, *S. tephronota* - Eastern Rock Nuthatch, *Tichodroma muraria* – Wallcreeper, *Certhia familiaris* - Eurasian Treecreeper, *Calandrella brachydactyla* - Pale Rock Sparrow, *Passer domesticus* - House Sparrow, *Petronia petronia* - Rock Sparrow, *Montifringilla nivalis* - White-winged Snowfinch, *Fringilla coelebs* Linn., 1758 - Common Chaffinch, *Fringilla montifringilla* Linn., 1758 – Brambling, *Chloris chloris* Linn., 1758 - Common Greenfinch, *Ardea purpurea* Linnaeus, 1766 - Purple Heron, *Ciconia nigra* Linnaeus, 1758 - Black Stork, *Milvus migrans* Bodd., 1783 - Black Kite, *Circus macrourus* Gm., 1771 - Pallid Harrier, *Accipiter brevipes* Sev., 1850 - Levant Sparrowhawk, *Buteo rufinus* Cretz., 1827 - Long-legged Buzzard, *Circaetus gallicus* Gmelin, 1788 - Short-toed Eagle,

C*langa clanga* Pall., 1811 - Greater Spotted Eagle, *Clanga pomarina* Brehm, 1811 - Lesser Spotted Eagle, *Falco subbuteo* Linn., 1758 - Hobby Falcon, *Falco columbarius* Linn., 1758 – Merlin, *Otis tarda* Linn., 1758 - Great Bustard, *Tetrax tetrax* Linn., 1758 - Little Bustard, *Glareola nordmanni* Nord., 1842 - Black-winged Pratincole, *Pterocles orientalis* Linn., 1758 - Black-bellied Sandgrouse, *İrania gutturalis* Guer., 1843 - White-throated Robin, *Linaria flavirostris* Linn., 1758 – Twite, *Rhodopechys sanguinea* Could.,1838 - Asian Crimson-winged Finch, *Carpodacus erythrinus* Pall., 1770 - Common Rosefinch, *C.rubicilla* Culd., 1775 - Great Rosefinch, *Loxia curvirostra* Linn., 1758 - Red Crossbill, *Pyrrhula coccothraustes* Linn., 1758 – Hawfinch, *Emberiza cia* Linn., 1766 - Rock Bunting, *E.melanocephala* Scop., 1769 - Black-headed Bunting) have come across. 32 species of birds registered in the occupied territories (*A.purpurea* Linnaeus, 1766 - Purple Heron, *C.nigra* Linnaeus, 1758 - Black Stork, *M.migrans* Bodd., 1783 - Black Kite, *M.milvus* Linn., 1758 - Red Kite, *C.macrourus* Gm., 1771 - Pallid Harrier, *A.brevipes* Sev., 1850 - Levant Sparrowhawk, *B.rufinus* Cretz., 1827 - Long-legged Buzzard, *C.gallicus* Gmelin, 1788 - Short-toed Eagle, *C.clanga* Pall., 1811 - Greater Spotted Eagle, *C.pomarina* Brehm, 1811 - Lesser Spotted Eagle, *A.heliaca* Savigny, 1809 - Asian Imperial Eagle, *A.chrysaetos* Linn., 1758 - Golden Eagle, *Gypaetus barbatus* Linn., 1758 - Bearded Vulture, *Neophron percnopterus* Linn., 1758 - Egyptian Vulture, *Aegypius monachus* Linn., 1766 - Black Vulture, *Gyps fulvus* Habl., 1783 - Griffon Vulture, *Falco cherrug* Gray, 1834 - Saker Falcon, *F.peregrinus* Tunst., 1771 - Peregrine Falcon, *F.subbuteo* Linn., 1758 - Hobby Falcon, *F.columbarius* Linn., 1758 – Merlin, *F.naumanni* - Lesser Kestrel, *L.mlokosiewiczi* Taczanowski, 1875 - Caucasian Black Grouse, *T.caspius* Gmelin, 1784 - Caspian Snowcock, *P.perdix* Linn., 1758 - Grey Partridge, *P.colchicus* Linn., 1758 - Common Pheasant, *O.tarda* - Great Bustard, *T.tetrax* Linn., 1758 - Little Bustard, *G.nordmanni* Nord., 1842 - Black-winged Pratincole, *P.orientalis* Linn., 1758 - Black-bellied Sandgrouse, *S.tephronota* Scharp., 1872 - Eastern Rock Nuthatch, *C.erythrinus* Pall., 1770 - Common Rosefinch, *İ.gutturalis* Guer., 1843 - White-throated Robin) have been included in the II edition of the Red Book (2013). Most of these species are included in the lists of international conventions (Bern, Bonn, CITES, AEWA).

The Lachin sanctuary, Dalidagh and Murovdagh (Gamishdagh) are some of the main habitats of birds of prey included in the Red List of the International Union for Conservation of Nature (IUSN) and the Caucasian Black Grouse - *Lyrurus mlokosiewiczi.* These areas are considered to be one of the international migration corridors for protected birds. The Caucasian tetras and Caspian vultures, which are susceptible to any adverse effects and are endemic to the Caucasus, have settled in the supalpine and alpine zone of this area.

Over half of the species composition of mammals in the country is rare. Their list includes almost all insectivors (Соколов, Тембатов, 1989; Гошуналиев, 1990a, 1990b), about 50% of bats (Рахматулина, 1989b, 1990, 1995a, 1995b), 40% of rodents, up to 60% of predators belong to all ungulates, except wild boar (Quliyev, 1997).

The services of Vereshagin, Asadov and Guliyev, in the study of the fauna of mammals of Azerbaijan are great (Верещагин, 1937, 1942, 1947, 1951a, 1959; Асадов, 1960; Azərbaycanın Heyvanlar aləmi. Onurğalılar, 2004; Кулиев, Аскеров, 2012e; Quliyev, 2015).

According to the article published by Vereshagin in 1942, 56 species related to the theriofauna of the Karabakh territory (8 species of insects, 10 species of bats, 1 species of Lagomorpha, 18 species of rodents, 16 species of predators, 4 species of ungulates) (Vereshagin, 1942), according to Alakbarov 61 species of mammals (insectivores - 8 species, bats - 15 species, *Lagomorpha* - 1 species, rodents - 20 species, predators - 13 species, ungulates - 4 species) are recorded (Алекперов, 1966). According to Guliyev, currently 75 species of mammals (12 species of insects, 20 species of bats, 1 species of rabbits, 25 species of rodents, 13 species of predators, 4 species of ungulates) are recorded in the area (Quliyev, 2021).

8 species out of 13 species of insectivores (Insectivora) in the territory of Karabakh (*Erinaceus concolor* Martin, 1838 - Southern White – breasted Hedgehog, *Talpa levantis* Thomas, 1906 - Levantine Mole, *Sorex raddei* Satunin, 1895 - Radde`s Shrew, *S.satunini* Ognev, 1922 (Syn. *S. caucasica* Satunin, 1913) - Caucasian Shrew, *N.teres* Miller, 1908 (Syn. *N.schelkovnikovi* Satunin, 1913) -

Transcaucasian Water Shrew, *Crocidura suaveolens* Pallas, 1811 - Lesser White-toothed Shrew, *Crocidura leucodon* Hermann, 1780 - Bicolored Shrew, *Crocidura gueldenstaedti* Pallas, 1811 - Gueldenstaedt`s Shrew), 20 species out of 34 species of bats (Chiroptera) (*Rhinolophus hipposideros* Borkhausen,1797 - Lesser Horseshoe Bat, *Rhinolophus blasii* Peters, 1866 - Blasius`s Horseshoe Bat, *Rhinolophus euryale* - Blasius, 1853 Mediterranean Horseshoe Bat, *Rhinolophus mehelyi* Matschie, 1901 - Mehely`s Horseshoe Bat, *Rhinolophus ferrumequinum* Schreber, 1774 - Greater Horseshoe Bat, *Myotis blythii* Tomes, 1857 - Lesser Mouse-eared Bat, *Myotis nattereri* Kuhl, 1817 - Natterer`s Bat, *Myotis emarginatus* Geoffroy, 1806 - Geoffroy`s Bat, *Myotis mystacinus* Kuhl, 1817 - Whiskered Bat, *Plecotus auritus* Linnaeus, 1758 - Brown Long-eared Bat, *Barbastella barbastellus* Schreber, 1774 - Western Barbastelle, *Barbastella leucomelas* Satunin, 1908 - Eastern Barbastelle, *Nyctalus noctula* Schreber, 1774 - Common Noctule, *Nyctalus leisleri* Kuhl, 1817 - Lesser Noctule, *Pipistrellus pipistrellus* Schreber, 1774 - Common Pipistrelle, *Pipistrellus kuhlii* - Kuhl`s Pipistrelle, *Hypsugo savii* Bonaparte, 1837 - Savi`s Pipistrelle, *Eptesicus serotinus* - Serotine Bat, *Minopterus schreibersii* Kuhl, 1817 - Schreiber's Common Bent-winged Bat, *Tadarida teniotis* Rafinesque, 1814 - European Free-tailed Bat), 2 species from *Lagomorpha* (*Lepus europaeus* Pallas, 1778 - European Hare, *Oryctolagus cuniculus* Linnaeus, 1758 - European Rabbit), 19 species of 37 orders from Rodentia, (*Sciurus anomalus* Guldenstaedti,1792 - Caucasian Squirrel, *Hystrix indica* Kerr., 1792 - İndian Crested Porcupine, *Glis glis* L., 1766 - Edible Dormouse, *Dryomys nitedula* Pallas,1778 - Forest Dormouse, *Allactaqa euphratica* Thom., 1881 - Euphrates Jerboa, *A.elater* Licht., 1825 - Small Five-toed Jerboa, *Rattus rattus* L., 1758 - Black Rat, *R.norvegicus* Berk., 1769 - Brown Rat, *Mus musculus* L.,1758 - House Mouse, *Sylvaemus uralensis* Pallas, 1811 - Herb Field Mouse, *S. witherbyi* Thomas, 1902 - Steppe Field Mouse, *S.ponticus* Sviridenko, 1936 - Black Sea Field Mouse, *Crisetulus migratorius* Pallas, 1773 - Grey Dwarf Hamster, *Arvicola amphibius* L., 1758 (*A.terrestris* L., 1758) - European Water Vole, *Mictotus majori* Thomas, 1906 - Major`s Pine Vole, *M.nazarovi* Schidlovsky, 1938 - Nasarov`s Vole, *M.sosialis* Pallas, 1773 - Social Vole, *M.arvalis* - Common Vole, *Ch.nivalis* Martins,1842 - European Snow Vole), 11 species from Carnivora group (*Canis lupus* L., 1758 - Gray Wolf, *Canis aureus* L., 1758 - Golden Jackal, *Vulpes vulpes* L., 1758 - Red Fox, *Mustela nivalis* L., 1758 - Least Weasel, *Martes martes* L., 1758 - European Pine Marten, *Martes foina* Erxleben,1777 - Beech Marten, *Meles meles* L., 1758 - European Badger, *Lutra lutra* L., 1758 - Eurasian otter, *Felis silvestris* Schreber, 1777 - Wild Cat, *Lynx lynx* L., 1758 - Eurasian Lynx, *Ursus arctos* L., 1758 - Brown Bear, *Panthera pardus* L., 1752 - Leopard), 4 species from Artiodactyla group (*Sus scrofa* Linnaeus, 1758 - Wild Boar, *Capra aegagrus* Erxleben, 1777 - Bezoar Goat, *Capreolus capreolus* L., 1758 - European Roe Deer, *Rupicapra caucasica* Lydekker, 1910 - Caucasian Chamois) have been inhabited (Верещагин, 1959; Гошуналиев, 1990, 1990a; Рахматулина, 1990, 1994, 1995a, 1995b; Quliyev, 2015).

Before the occupation of Karabakh, 24 species out of 75 mammals belonging to 6 orders (*Rhinolophus euryale* Blasius, 1853 - Mediterranean Horseshoe Bat, *Barbastella barbastellus* Schreber, 1774 - Western Barbastelle, *Rhinolophus mehelyi* Matschie, 1901 - Mehely`s Horseshoe Bat, *Myotis blythii* Tomes, 1857 - Lesser Mouse-eared Bat, *Rhinolophus hipposideros* Borkhausen, 1797 - Lesser Horseshoe Bat, *Rhinolophus ferrumequinum* Schreber, 1774 - Greater Horseshoe Bat, *Myotis emarginatus* Geoffroy, 1806 - Geoffroy`s Bat, *Tadarida teniotis* Rafinesque, 1814 - European Free-tailed Bat, *Hystrix indica* Kerr., 1792 - İndian Crested Porcupine, *Chionomys nivalis* Martins,1842 - European Snow Vole, *Ursus arctos* L., 1758 - Brown Bear, *Martes martes* L., 1758 - European Pine Marten, *Felis silvestris* Schreber, 1777 - Wild Cat, *Lynx lynx* L., 1758 - Eurasian Lynx, *Capra aegagrus* Erxleben, 1777 - Bezoar Goat, *Capreolus capreolus* L., 1758 - European Roe Deer, *Ovis orientalis* Gmelin, 1774 - Mouflon, *Talpa levantis* Thomas, 1906 - Levantine Mole, *Lutra lutra* L., 1758 - Eurasian otter*)* have been included in the "Red Book" of Azerbaijan (2013). Among these species you can come across Striped Hyena *Hyaena hyaena* L., 1758, Pallas`s Cat - *Oto-*

colobus manul Pallas, 1778, including in the Republican and International Red List. Eurasian Lynx - *Lynx lynx* L., 1758, Leopard *Panthera pardus* L., 1752, Brown Bear - *Ursus arctos* L., 1758, Bezoar Goat – *Capra aegagrus* Erxleben, 1777, European Roe Deer - *Capreolus capreolus* L., 1758 species have been listed in the Red List of the IUSN.

The first edition of the RB, published in 1989, included the names of 108 species of animals, embracing 14 species of mammals, 36 species of birds, 13 species of reptiles and amphibians, 5 species of fish and 40 species of insects. The second edition of the RB, published in 2013, included 223 species of rare, endangered and endangered species in need of protection. Of these, 1 species belongs to the hydrofauna of our republic, 1 species Oligochaeta, 1 species Crustacea, 1 species Mollusca, 78 species Insecta, 9 species Pisces, 6 species Amphibia, 14 species Reptilia, 72 species Aves, and 42 species Mammalia.

As a result of conservation measures included in the I and II editions of the Red Book of Azerbaijan, there is a need to remove from the list of species with a significant increase in their number, as well as to add to the list of species of fauna with a decrease in their number. Undoubtedly, based on international experience, the lists provided by the Red Book of Azerbaijan should be regularly updated and republished every 10 years.

The third edition of the Red Book of Azerbaijan, which is scheduled for publication in 2023, will include 279 species of rare, endangered and endangered species in need of protection. In addition to monitoring of 3 species of aquatic invertebrates and 9 species of fish included in the II edition of the Red Book and to be included in the III edition, the reduction of the number of pearl snail - *Unio mingrelicus* Drouet, 1881 and medicinal leech - *Hirudo orientalis* will be clarified. According to the results of the monitoring to be conducted by researchers, the issue of inclusion of these species and 2 bony fish species in the III edition of the Red Book will be considered.

The second edition of the Red Book of Azerbaijan (2013) includes 77 species of insects. In the third edition, it is proposed to remove 14 species from the list, and to increase the number of species on the updated list to 118 by adding 55 species. It is planned to include 6 species of reptiles in the 3rd edition of the Red Book of Azerbaijan (2013). The 3rd edition should clarify the issue of removing 4 species of birds from the list and adding 15 new species to the previous list, the updated list of mammals, removing the 8 species of mammals from the list of mammal species and including 1 species in the second edition.

As the fauna of our liberated territories has not existed for the last 30 years, monitoring should begin as soon as possible

CONCLUSIONS

According to the literature, 56 species of the insect fauna of previous years in Karabakh and surrounding areas are rare, endemic and endangered species.

7 species of the 53 fish species registered in the watersheds of the Lesser Caucasus, including Karabakh and the liberated territories, are included in the Red Book of Azerbaijan, and 4 species are included in the IUSN Red List.

4 out of 11 species of amphibians registered in Azerbaijan and 35 species out of 63 species of reptiles are found in the Lesser Caucasus natural region. 1 species of turtles, 10 species of lizards and 13 species of snakes are distributed in the fauna of Karabakh. 1 species of amphibians and 7 species of reptiles are included in the IUCN and the Red Book of Azerbaijan (2013).

Prior to the occupation, 32 species out of about 200 bird species registered in 16 orders and 57 genera in Karabakh and its environs were included in the Second Edition of the Red Book (2013). Most of these species are included in the lists of international conventions (Bern, Bonn, CITES, AEWA).

24 species out of 75 species of mammals belonging to 6 groups registered before the occupation in the territory of Karabakh were included in the Red Book (2013). Five of them are also included in the Red List of the International Union for Conservation of Nature (IUSN).

The third edition of the Red Book of Azerbaijan (2013), which is scheduled for publication in 2023, includes 279 species of rare, endangered and endangered species under threat.

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Azərbaycan Respublikasının «Qırmızı Kitabı»nın III nəşrinin hazırlanmasına dair: Qarabağ faunasının qırmızı siyahısı

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Məqalə, Qarabağ və ətraf ərazilərin Ermənistan tərəfindən işğalına qədər AMEA Zoologiya institutunun əməkdaşlarının apardıqları tədqiqat işlərinin nəticələri əsasında hazırlanmışdır. 30 ilə yaxın işğal altında olmuş Qarabağ və ətraf ərazilərdə əvvəlki illərdə aparılan tədqiqatların nəticələrinə əsasən həşəratlar faunasının 56 növü nadir, endemik və nəsli kəsilmək təhlükəsində olan növlərdir. Azərbaycanın Kiçik Qafqaz ərazisində qeydə alınan 53 balıq növündən 7-si Azərbaycanın "Qırmızı Kitab" ına (QK), 4 növ isə IUSN-in Qırmızı siyahısına daxil edilmişdir. Həkəri çayında 12, Bəsitçay və Oxçuçaylarında isə 13 növ balığın yayıldığı müəyyən edilmişdir. Kiçik Qafqaz təbii vilayətində Azərbaycanın batraxofaunasına aid 11 növ amfibilərdən 4-nə, herpetofaunasına aid 63 növ reptililərdən isə 35-i qeydə alınır. Qarabağ ərazisində reptililər faunası üzrə tısbağalardan 1, kərtənkələlərdən 10, ilanlardan isə 13 növ yayılmışdır. Amfibilərdən 1, reptililərdən isə 7 növ *İUCN*-nin və QK-a (2013) daxil edilmişdir. İşğala qədər Qarabağ və onun ətraf ərazilərində 16 dəstəyə, 57 fəsiləyə mənsub qeydə alınan 200-ə yaxın quş növündən 32-növ QK-ın II nəşrinə (2013) daxil edilmişdir. Bu növlərin əksəriyyəti beynəlxalq konvenvensiyalarının (Bern, Bonn, CITES, AEWA) siyahılarına daxil edilmiş növlərdir. Qarabağ ərazisində işğala qədər 6 dəstəyə mənsub, 75 növ məməlidən 24 növü Azərbaycanın QK-na (2013) daxil edilmişdir. Bunlardan da 5 növ eyni zamanda Beynəlxalq Təbiəti Mühafizə İttifaqının Qırmızı Siyahısına (İUSN) da daxil edilmişdir. 2013-cü ildə nəşr olunan QK-ın II nəşrinə, nadir, nəsli kəsilmək və təhlükə altında olmaqla, qorunmasına ehtiyac yaranan 223 növ heyvan daxıl edilmişdir. Bunlardan 1 növ *Oligochaeta*, 1 növ *Crustacea*, 1 növ *Mollusca*, 77 növ *Insecta*, 9 növ *Pisces*, 6 növ *Amphibia*, 14 növ *Reptilia*, 72 növ *Aves*, 42 növ *Mammalia* sinfinə aiddir. 2023-cü ildə nəşr edilməsi nəzərdə tutulan QK-ın III nəşrinə, nadir, nəsli kəsilmək və təhlükə altında olmaqla, qorunmasına ehtiyac yaranan 279 növ heyvanın daxil edilməsi nəzərdə tutulur. QK-ın III nəşrinə daxil edilməsi təklif edilən tibb zəlisi və 2 sümüklü balıq növünün məsələsinə aydınlıq gətiriləcək. Qırmızı Kitabın II nəşrinə daxil edilmiş həşəratlar sinifinə aid 77 növdən, III nəşrdə 14 növün siyahıdan çıxarılması, 55 növün isə əlavə edilməsi ilə yeniləşmiş siyahıda olan növlərin sayının 118-ə çatdırılması təklif edilir. Amfibilərin siyahısında (6 növ) dəyişiklik edilməyəcəyi, reptililərin siyahısına isə əlavə 6 növ sürünən daxil edilməsi nəzərdə tutulur. III nəşrdə əvvəlki siyahıya 15 yeni növün daxil edilməsi, məməli heyvanların yenilənmiş siyahısına II nəşrdə məməli heyvan növləri siyahısından 8 növ məməlinin çıxarılması və 1 növünün daxil edilməsi məsələsinə baxılacaq.

***Açar sözlər**: Fauna, onurğasız, onurğalı, Qırmızı Kitab, amfibi, reptili, balıq, məməli, İUSN, dəstə, fəsilə*

Подготовка третьего издания «Красной книги» Азербайджанской Республики: Красный список фауны Карабаха

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Статья основана на результатах исследований, проведенных сотрудниками Института зоологии НАНА до оккупации Арменией Карабаха и прилегающих территорий. Согласно исследованиям, проведенным в предыдущие годы в Карабахе и его окрестностях, которые находились под оккупацией почти 30 лет, 56 видов фауны насекомых являются редкими, эндемичными и находящимися под угрозой исчезновения. Из 53 видов рыб, зарегистрированных на территории Малого Кавказа

Азербайджана, 7 занесены в Красную книгу Азербайджана (КК), а 4 вида - в Красный список Международного союза охраны природ (МСОП или IUSN). Установлено, что 12 видов рыб обитают в реке Хакари, а 13 видов - в реках Баситчай и Охчучай. В природной области Малого Кавказа зарегистрировано 4 из 11 видов земноводных, относящихся к батрахафауне Азербайджана, и 35 из 63 видов рептилий, относящихся к герпетофауне. На территории Карабаха из фауны рептилий обитают 1 вид черепах, 10 видов ящериц и 13 видов змей. 1 вид земноводных и 7 видов рептилий включены в МСОП и КК (2013). До оккупации в Карабахе и его окрестностях из зарегистрированных примерно 200 видов птиц, относящихся к 16 отрядам и 57 семействам, 32 вида были включены во второе издание Красной книги (2013 г.). Большинство этих видов внесено в списки международных конвенций (Берн, Бонн, МСОП, AEWA). До оккупации Карабаха из 75 видов млекопитающих, относящихся к 6 отрядам 24 вида были включены в Красную книгу Азербайджана (2013 г.). Пять из них также внесены в Красный список МСОП. Второе издание Красной книги, опубликованное в 2013 году, включает 223 редких и находящихся на грани исчезновения вида. Из них 1 вид относится к классу *Oligochaeta*, 1 вид - *Crustacea*, 1 вид - *Mollusca*, 77 видов - *Insecta*, 9 видов - *Pisces*, 6 видов - *Amphibia*, 14 видов - *Reptilia*, 72 вида – *Aves* и 42 вида относятся к классу *Mammalia*. Третье издание Красной книги, которое планируется опубликовать в 2023 году, будет включать 279 редких и находящихся на грани исчезновения видов. Будет прояснен вопрос о лечебной пиявке и двух костных рыбах, предлагаемых для включения в третье издание Красной книги. Предлагается в третьем издании Красной книги из 77 видов насекомых, включенных во второе издание удалить 14 видов и увеличить количество видов в обновленном списке до 118, добавив 55 видов. Список амфибий (6 видов) не будет изменен, а список рептилий будет включать 6 дополнительных видов. В третьем издании будет рассмотрено включение 15 новых видов в предыдущий список. В списке млекопитающих будет рассмотрено исключение 8 видов из списка во втором издании и включение 1 вида в обновленный список.

Ключевые слова: *Фауна, беспозвоночные, позвоночные, Красная книга, земноводные, рептилии, рыбы, млекопитающие, МСОП, отряд, семейство*